AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims

Claims 1-38 (Canceled).

Claim 39 (New): A camera comprising:

an image sensor arranged to generate an image signal;

a lens arrangement which focusses an image onto the image sensor, the focus being variable in accordance with a control signal applied thereto;

an encoder arranged to encode the image signal from the image sensor into an encoded signal compressed form;

a control circuit arranged to control the focus of the lens arrangement by applying said control signal to the lens arrangement,

wherein

the control circuit is capable of controlling the encoder to operate in two modes, wherein in the first mode the encoded signal preserves low spatial frequency components of the image signal preferentially and in the second mode the encoded signal preserves high spatial frequency components of the image signal preferentially, and

the control circuit is operative to control the focus of the image by:

controlling the encoder to operate in said second mode;

determining the amount of data in the encoded signal as a measure of the quality of the focus of the image on the image sensor;

controlling the focus of the lens arrangement on the basis of the determined amount of data; and

subsequently controlling the encoder to operate in said first mode.

Claim 40 (New): A camera according to claim 39, wherein

the encoder comprises a JPEG encoder comprising:

a discrete cosine transformation block arranged to transform the image signal into spatial frequency components;

a quantisation block arranged to quantise the spatial frequency components output from the discrete cosine transformation block in accordance with a matrix of quantisation levels each in respect of a respective spatial frequency component; and

an encoder block arranged to encode the quantised image signal in the frequency domain output from the quantisation block, and

the control circuit is capable of controlling the encoder to operate in said two modes by causing the quantisation block to use different respective matrices of quantisation levels.

Claim 41 (New): A camera according to claim 39, wherein in the second mode the control circuit causes the quantisation block to use a matrix of quantisation levels which is the reciprocal of a matrix of spatial frequency coefficients of a high-pass filter.

Claim 42 (New): A camera according to claim 41, wherein said high-pass filter is the Laplacian of a Gaussian filter.

Claim 43 (New): A camera according to claim 39, wherein said variable focus lens arrangement comprises an actuator arranged to drive movement of the lens arrangement in accordance with the control signal applied thereto to vary the focus of the image on the image sensor.

Claim 44 (New): A camera according to claim 43, wherein the actuator is a piezoelectric actuator.

Claim 45 (New): A camera according to claim 39, wherein said controlling of the focus of the lens arrangement on the basis of the determined amount of data comprises controlling the focus of the lens arrangement to minimise the determined amount of data.